

Notice of Allowability	Application No.	Applicant(s)	
	09/963,575	MAEDA, TATSUYA	
	Examiner	Art Unit	
	Vincent P. Barth	2877	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to RCE dated 15 December 2003.
2. ☒ The allowed claim(s) is/are 1-8.
3. ☒ The drawings filed on 27 September 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____.
 - (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the margin according to 37 CFR 1.121(d).

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1 <input type="checkbox"/> Notice of References Cited (PTO-892) | 5 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____. |
| 3 <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No. <u>0903,1203</u> | 7 <input type="checkbox"/> Examiner's Amendment/Comment |
| 4 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9 <input type="checkbox"/> Other _____. |

DETAILED ACTION

Preliminary Comments

1. Applicant's Amendments 14 October 2003, in connection with the Request for Continued Examination dated 15 December 2003, have placed the Application in a condition for allowance as written. A discussion of the references found in earlier Office Actions is set forth below in the section entitled Comments. Accordingly, the following represents a reasoned statement for allowability.

Allowable Subject Matter

2. Claims 1-8 are allowable, since the prior art references, either considered alone or in combination, do not disclose or render obvious the limitations set forth therein.

3. Referring to Claim 1, the prior art references, either considered alone or in combination, do not disclose or render obvious the limitations whereby a method of inspecting terminal metal fittings having a sheathed electrical wire with diffuse reflection and a crimping piece with a mirrored reflection surface, and involves the step of illuminating the wire from a first specific direction, taking an image of the wire from a second specific direction and calculating whether the area is less than or not less than a threshold, and judging whether the crimping is good or bad on the basis of the area, in combination with the remaining limitations in the claim. Referring to Claim 2, the prior art references, either considered alone or in combination, do not disclose or render obvious the limitations whereby a system for inspecting terminal metal fittings having a sheathed electrical wire with diffuse reflection and a crimping piece with a mirrored reflection

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surface, comprises a light source to illuminate the connecting portion, an imaging means to image the connection, and a judging means to determine whether the crimping is good or bad based on whether the area is less than or not less than a threshold obtained by processing, in combination with the remaining limitations in the claim. Claims 3 and 4 are allowable based on their dependency upon the claim from which each is dependent. Referring to Claim 5, the prior art references, either considered alone or in combination, do not disclose or render obvious the limitations whereby a system for inspecting terminal metal fittings having a sheathed electrical wire with diffuse reflection and a crimping piece with a mirrored reflection surface, comprises a light source to illuminate the connecting portion, an imaging means to image the connection, and a judging means to determine whether the crimping is good or bad based on whether the area is less than or not less than a threshold obtained by processing, in combination with the remaining limitations in the claim. Claims 6-8 are allowable based on their dependency upon the claim from which each is dependent.

Comments

4. The Examiner finds that the Ichikawa reference does not explicitly calculate the area of the crimps. Such finding had been set forth in the previous Office Action (pg. 2, para. 3). Consequently, Ichikawa does not provide a threshold for any area calculations beyond which or beneath which the crimp is deemed good or bad. Upon reconsideration, the Examiner finds that the area histograms described in Ichikawa, and illustrated in Figs. 9A-10B, relate to luminance levels and positional information, rather than any calculation of the area of crimps. In this regard, the term "area histogram" appears to be a non-conventional use of the term, which would

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ordinarily be taken to mean that a bar graph, or the like, would provide a graphic representation of the area calculations. Moreover, Ichikawa characterizes the histograms as "area histograms of optical *intensity*" (emphasis added, col. 7, lns. 15-66), rather than simply *geometrical* area calculations (i.e., the conventional meaning). Accordingly, based on, *inter alia*, the reasons just set forth, the Ichikawa reference should not be combined with the Kent reference, in which an area threshold calculation formed the basis of determining the quality of an electrical connection.

CONCLUSION

5. Applicant's Claims 1-8 are allowed based on the reasons set forth above.
6. Any inquiries concerning this communication from the Examiner should be directed to Vincent P. Barth, whose telephone number is 703-605-0750, and who may be ordinarily reached from 9:00 a.m. to 5:30 p.m., Monday through Friday. Note that Examiner Barth expects to move to the new U.S. Patent Office location on or about 21 January 2004, and will have a new telephone number following that date, which is: (571) 272-2410. The official fax number for communications to the group is 703-872-9306.
7. If attempts to reach the Examiner prove unsuccessful, the Examiner's supervisor is Frank G. Font, who may be reached at 703-308-4881.
8. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1782.



Richard A. Rosenberger
Primary Examiner